DOCKSTHEFUTURE

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 770064

Co-funded by the Horizon 2020 programme of the European Union

DOCKSTHEFUTURE

defining the concept of "Port of the Future"

Disclaimer: *The views represented in this document only reflect the views of the authors and not the views of Innovation & Networks Executive Agency (INEA) and the European Commission. INEA and the European Commission are not liable for any use that may be made of the information contained in this document. Furthermore, the information are provided "as is" and no guarantee or warranty is given that the information fit for any particular purpose. The user of the information uses it as its sole risk and liability*

Co-funded by the Horizon 2020 programme of the European Union

DtF Decision Support System

THE TOOL

Co-funded by the Horizon 2020 programme of the European Union

What is it?

- The DtF DSS is an excel based decision support system allowing decision makers to find the best suitable solution, based on past experience, for achieving port related strategic objectives

Co-funded by the Horizon 2020 programme of the European Union

DSS Rationale

Ongoing challenges

Port decision makers face multi-dimensional challenges with investments impacted by:

- ✓ Long term goals vs short term conflicting interests
- ✓ Stakeholders' competition
- ✓ Interconnected decision making processes

Open issues

Therefore, port decision makers need to:

- ➢ Cope with multi-dimensional issues and critical challenges
- ➢ Find ways to simplify the research for feasible solutions
- ➢ Promote long term port development, assuring short term value for port stakeholders

Co-funded by the Horizon 2020 programme of the European Union

A potential problem scenario

We might look at ways to reduce emissions..

E.g., by promoting alternative fuels

..but at the same time we might want to reduce port activities' negative impacts on local community!

..but as demonstrated by relevant protests, this might increase conflicts with local communities..

Co-funded by the Horizon 2020 programme of the European Union

DSS Objectives

The DSS is a valuable tool for understanding which measures, projects and initiatives need to be pursued in order to achieve ports' high level strategic objectives

- To help in selecting the "right" *initiatives* to achieve a series of Strategic Objectives chosen by the *user*
- To support complex decision-making processes in which there is a multi-objective function

Co-funded by the Horizon 2020 programme of the European Union

DSS Interface

Sorted Projects

Basic interface:
Select Strategic Objectives

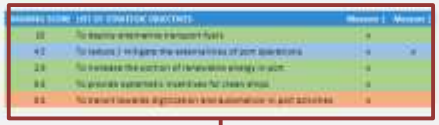
Suggested measures to investigate

Projects details

Co-funded by the Horizon 2020 programme of the European Union

DSS Interface

Sorted Projects



Strategic Objective that can be pursued via the selected measures

Projects details

Basic interface:
Select Measures

Co-funded by the Horizon 2020 programme of the European Union

DSS Limitations

- The effective use of the tool is influenced by:
  - Database reliance and interdependence
  - Missing key indicators on performance and transferability
  - The contextualization of the measures and their applicability to the specific context is up to the user (i.e., further analysis will be needed)

Co-funded by the Horizon 2020 programme of the European Union

Further development

- In respect to the first released version, future DSS apps will:
  - Embed other DtF outputs (e.g. PCI and TA-score)
  - Guarantee full interoperability
  - *Enlarge the number of initiatives considered*

Decision Support System (DSS)

Experts
Hilda Ghiara, UNIGE
Alessio Tei, UNIGE
Nicola Sacco, UNIGE

DOCKSTHEFUTURE

Co-funded by the Horizon 2020 programme of the European Union